## **PUBLIC SUBMISSION**

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Draft Chesapeake Bay Total Maximum Daily Load

Comment On: EPA-R03-OW-2010-0736-0001

Clean Water Act Section 303(d): Notice for the Public Review of the Draft Total Maximum Daily Load (TMDL) for

the Chesapeake Bay

**Document:** EPA-R03-OW-2010-0736-0619

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## **Submitter Information**

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## **General Comment**

Given that 48 percent of the nitrogen load in streams in the Bay watershed is transported through ground water and that this information is not included in the Chesapeake Bay Model, how can the current Model have sufficient accuracy?

The accuracy of the Chesapeake Bay model should be in question because the model does not accurately account for ground water as a source of nitrates. The United States Geological Service (USGS) conducted a multi-year study in the Chesapeake watershed of nitrate in ground water. The 2002 report (USGS Fact Sheet FS-091-03) states:

"An average of 48 percent of the nitrogen load in streams in the Bay watershed was transported through ground water, with a range of 17 to 80 percent in different streams."

The study also reports that due to lag time, the median age of this groundwater is 10 years with 25 percent of the samples having an age of 7 years or less and 75 percent of the samples having an age of up to 13 years.

During the March 25 EPA TMDL webinar, a question was asked about whether this ground water nitrate data was accounted for in the Chesapeake Bay model. Mr. Richard Batiuk answered the question stating that it was not currently part of the model but that the model was designed to accommodate that information when it became available.